OCapture

(Oscar's Data Capture Program)

USER'S MANUAL

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July 2005

This program allows you to read data points from graphs and save them as numbers into text files. All you need is a scanned copy of the graph in bitmap (BMP) format.

The zip file contains the program (OCAPTURE.EXE) and two sample bitmaps (QUAD.BMP and LOG.BMP) illustrating graphs with linear and log axes respectively.

The program is very simple to use.
Open the OCAPTURE.EXE file by double clicking on the icon.

Open your graphics file:
From the menu select File / Open, navigate to the appropriate folder and select your bitmap file form the file list. Your graph will appear on the screen. The components of the main program window are shown in Figure 1.

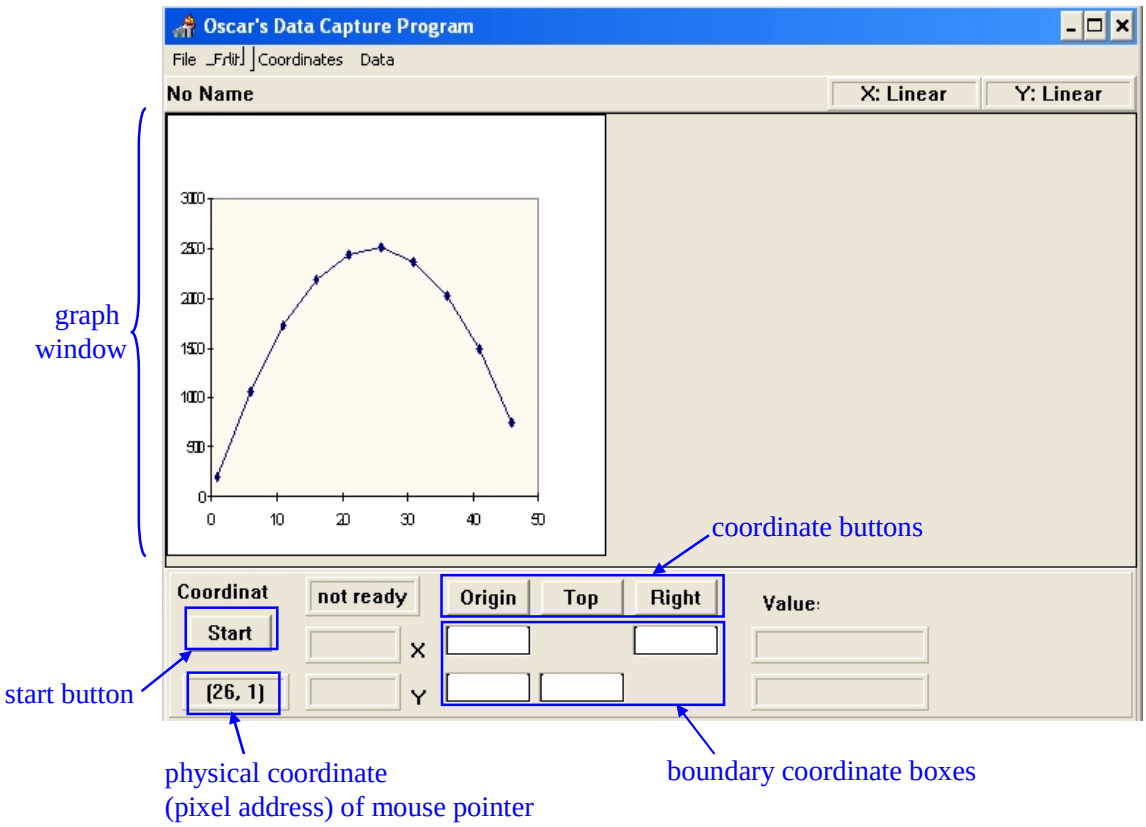

FIGURE 1

The graph window can accommodate large graphs, scroll bars will appear if the graph is larger than the window. Note that the software recognises only bitmap graphics (BMP) files.

STEP A: Set the logical coordinates:
You need to specify the logical coordinates for three points:

1) the origin (x and y axes),
2) the top left (y axis)
3) the bottom right (x axis).

For each of these points:

1) Click on the relevant point on the graph window. The point will appear as a red dot.
2) Enter the corresponding *x* and/or *y* coordinates in the boundary coordinate boxes.
3) Click on the associated coordinate button (Origin, Top or Right). The point will turn green, indicating that both the physical coordinates and the logical coordinates have been specified.
4) Repeat step (1) for the next point until finished setting the three boundary points. Once the three points are green you can proceed with data capture.

Note: if either or both axes are in log rather than linear scale use the Data / Axis type menu to indicate this.

STEP B: Capture Data
Click on the Start button; the status box must now read "ready" (see Figure 2.).

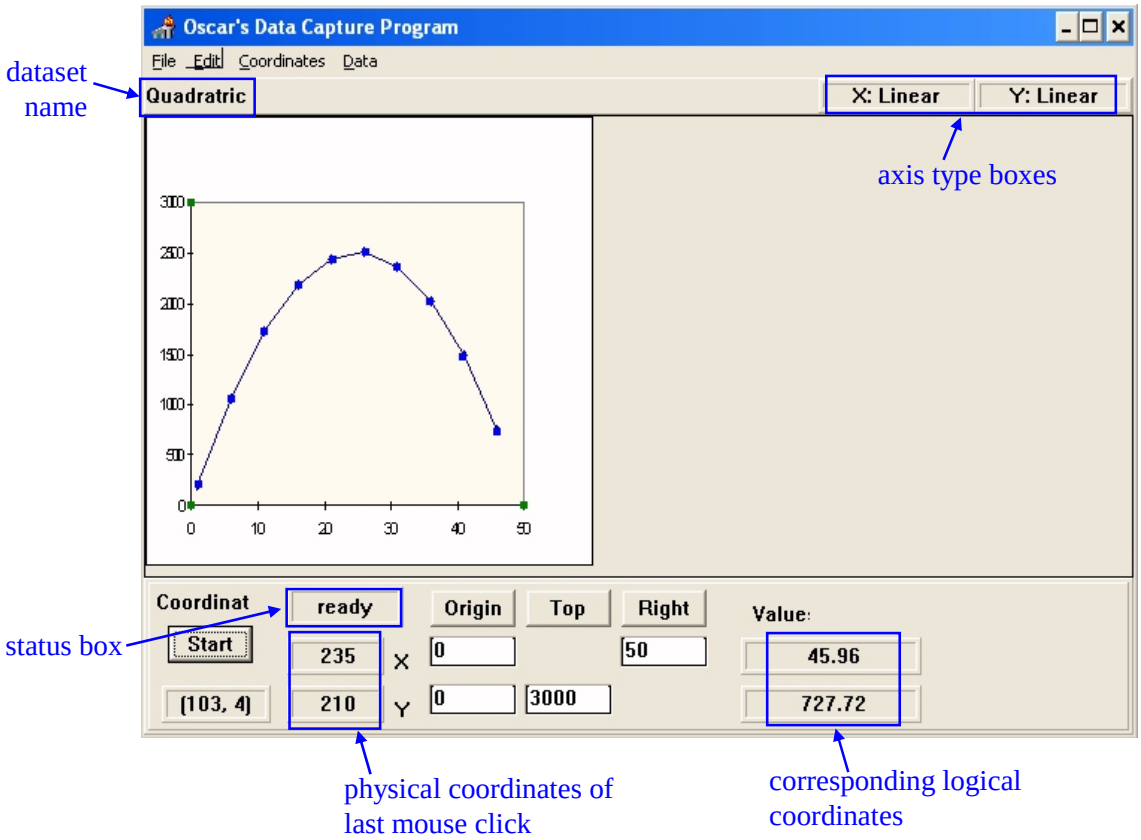

FIGURE 2

Now every time you click on the screen, the point will be translated to its logical coordinates and stored in memory. The logical coordinates of the current point will be shown in the "Value" boxes at the bottom right of the screen.

STEP C: Save Data
Save the data as a text file by selecting File / Save from the menu. This is a comma-delimited file that can be opened on a spreadsheet.

Note: if the graph you are reading contains more than one curve, read the curves in sequence. You can give a name to each dataset (curve) by selecting Data / Set name from the menu. Save each curve after you read it. This will clear the memory and allow you to read a new one (and change the name). You can keep on saving new data sets to the same file. When you attempt to save new data to an existing file a warning message will appear (see Figure 3). If you select Yes, your new data will replace any existing data, if you select No, the new data will be appended at the bottom of the existing file.

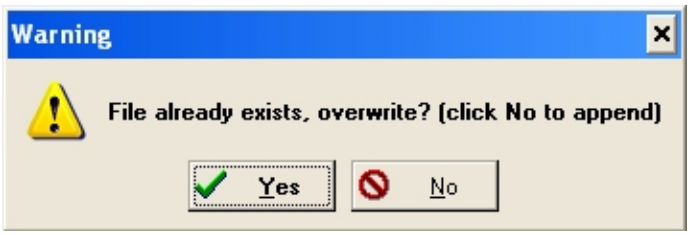

FIGURE 3

You can cycle between steps B and C as many times as desired without the need to redefine your boundary coordinates.